

Actual Wellpath Report

Gary Kestner OHI 210H AWP Proj: 20475

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REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY		
Field	Ohio	API/Legal	Gary Kestner OHI 210H
Facility	Gary Kestner OHI Pad	Wellbore	Gary Kestner OHI 210H AWB
Slot	Slot #210		

REPORT SETUP INFORMATION

Projection System	NAD83 / UTM Zone 17 North, US feet		
North Reference	Grid	User	WellArchitect@6.0
Scale	0.999619	Report Generated	1/21/2020 at 10:51:03 AM
Convergence at slot	0.30° East	Database	WA_MPL_EASTERNS_Defn

WELLPATH LOCATION

Local coordinates		Grid coordinates		Geographic coordinates	
North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
-8.47	20.24	1768613.70	14581172.84	40°08'54.9253"N	80°32'28.4700"W
		1768593.47	14581181.31	40°08'55.0100"N	80°32'28.7300"W
					85°29'19.4780"W

WELLPATH DATUM

Calculation method	SDC 41 (RKB) to Facility Vertical Datum	
Horizontal Reference Pt	Slot	SDC 41 (RKB) to Mean Sea Level
Vertical Reference Pt	SDC 41 (RKB)	SDC 41 (RKB) to Ground Level at Slot (Slot #210)
MD Reference Pt	SDC 41 (RKB)	Section Origin
Field Vertical Reference	Mean Sea Level	Section Azimuth
		1317.40ft
		1317.40ft
		26.00ft
		N 0.00, E 0.00 ft
		153.95°

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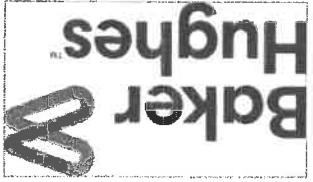
Southwestern Energy

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MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)	(Latitude)	(Longitude)	(ft)	(°)	(%/100ft)	(%/100ft)	(%/100ft)
0.00	0.00	170.430	0.00	0.00	0.00	0.00	1768613.70	14581172.84	40°08'54.9263"N	80°32'28.4700"W	0.00	0.00	0.00	0.00	0.00
26.00	0.00	170.430	26.00	0.00	0.00	0.00	1768613.70	14581172.84	40°08'54.9263"N	80°32'28.4700"W	0.00	0.00	0.00	0.00	0.00
182.00	0.09	170.430	182.00	0.12	-0.12	0.02	1768613.72	14581172.72	40°08'54.9241"N	80°32'28.4697"W	0.12	170.430	0.06	0.06	0.00
243.00	0.13	214.350	243.00	0.20	-0.23	-0.01	1768613.69	14581172.61	40°08'54.9230"N	80°32'28.4701"W	0.23	182.724	0.15	0.07	72.00
302.00	0.12	269.920	302.00	0.20	-0.28	-0.11	1768613.59	14581172.56	40°08'54.9225"N	80°32'28.4714"W	0.30	201.457	0.20	-0.02	94.19
394.00	0.03	358.990	394.00	0.14	-0.26	-0.21	1768613.49	14581172.58	40°08'54.9227"N	80°32'28.4726"W	0.33	218.898	0.13	-0.10	96.82
484.00	0.86	146.270	484.00	0.79	-0.79	0.17	1768613.87	14581172.05	40°08'54.9174"N	80°32'28.4678"W	0.81	168.091	0.98	0.92	163.64
530.00	1.48	134.280	529.99	1.69	-1.50	0.78	1768614.48	14581171.34	40°08'54.9104"N	80°32'28.4600"W	1.69	152.334	1.44	1.35	-26.07
571.00	1.42	134.540	570.97	2.67	-2.22	1.53	1768615.23	14581170.62	40°08'54.9032"N	80°32'28.4505"W	2.70	145.531	0.15	-0.15	0.63
639.00	1.56	149.760	638.95	4.38	-3.61	2.59	1768616.29	14581169.23	40°08'54.8894"N	80°32'28.4368"W	4.45	144.341	0.62	0.21	22.38
740.00	1.58	164.040	739.91	7.13	-6.14	3.67	1768617.37	14581166.70	40°08'54.8644"N	80°32'28.4231"W	7.15	149.147	0.39	0.02	14.14
785.00	1.91	167.310	784.89	8.47	-7.47	4.00	1768617.70	14581165.38	40°08'54.8513"N	80°32'28.4189"W	8.47	151.807	0.77	0.73	7.27
876.00	1.38	169.920	875.85	11.00	-10.03	4.53	1768618.23	14581162.82	40°08'54.8260"N	80°32'28.4123"W	11.00	155.695	0.59	-0.58	2.87
967.00	1.26	170.090	966.83	13.01	-12.09	4.89	1768618.59	14581160.75	40°08'54.8055"N	80°32'28.4078"W	13.04	157.971	0.13	-0.13	0.19
1058.00	0.68	171.070	1057.82	14.49	-13.61	5.15	1768618.85	14581159.24	40°08'54.7905"N	80°32'28.4046"W	14.55	159.280	0.64	0.64	1.08
1148.00	0.80	72.950	1147.81	15.10	-13.95	5.83	1768619.53	14581158.89	40°08'54.7871"N	80°32'28.3958"W	15.12	157.318	1.25	0.13	-109.02
1239.00	1.87	51.940	1238.79	14.89	-12.85	7.61	1768621.31	14581159.99	40°08'54.7979"N	80°32'28.3728"W	14.93	149.374	1.27	1.18	-23.09
1330.00	2.81	43.110	1329.71	13.78	-10.31	10.30	1768624.00	14581162.54	40°08'54.8229"N	80°32'28.3380"W	14.57	135.017	1.10	1.03	-9.70
1421.00	3.65	40.710	1420.56	11.85	-6.48	13.72	1768627.41	14581166.36	40°08'54.8605"N	80°32'28.2938"W	15.17	115.301	0.93	0.92	-2.64
1511.00	3.04	40.000	1510.41	9.75	-2.48	17.12	1768630.81	14581170.36	40°08'54.8998"N	80°32'28.2497"W	17.30	98.256	0.68	0.68	-0.79
1602.00	1.75	43.580	1601.33	8.29	0.37	19.63	1768633.32	14581173.21	40°08'54.9279"N	80°32'28.2172"W	19.63	88.916	1.43	-1.42	3.93
1693.00	0.84	58.860	1692.31	7.74	1.72	21.16	1768634.85	14581174.56	40°08'54.9412"N	80°32'28.1974"W	21.23	85.344	1.06	-1.00	16.79
1783.00	0.11	118.740	1782.30	7.81	2.02	21.80	1768635.49	14581174.86	40°08'54.9441"N	80°32'28.1891"W	21.89	84.698	0.88	-0.81	66.53
1874.00	0.27	247.000	1873.30	7.75	1.90	21.68	1768635.37	14581174.74	40°08'54.9429"N	80°32'28.1907"W	21.76	84.998	0.38	0.18	140.95
1965.00	0.34	236.830	1964.30	7.84	1.67	21.25	1768634.94	14581174.50	40°08'54.9406"N	80°32'28.1962"W	21.32	85.519	0.10	0.08	-11.18
1995.00	0.30	242.750	1994.30	7.85	1.58	21.11	1768634.80	14581174.42	40°08'54.9398"N	80°32'28.1980"W	21.17	85.717	0.17	-0.13	19.73
2072.00	0.13	322.820	2071.30	7.77	1.56	20.88	1768634.57	14581174.40	40°08'54.9396"N	80°32'28.2010"W	20.93	85.732	0.40	-0.22	103.99
2163.00	0.34	344.460	2162.30	7.40	1.90	20.74	1768634.43	14581174.74	40°08'54.9430"N	80°32'28.2027"W	20.83	84.765	0.25	0.23	23.78
2253.00	0.54	344.000	2252.30	6.72	2.57	20.55	1768634.24	14581175.40	40°08'54.9496"N	80°32'28.2051"W	20.71	82.885	0.22	0.22	-0.51
2344.00	0.30	348.780	2343.29	6.07	3.21	20.38	1768634.07	14581176.05	40°08'54.9559"N	80°32'28.2073"W	20.63	81.050	0.26	-0.26	3.05

WELLPATH DATA (238 stations) † = interpolated, ‡ = extrapolated station

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MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Buidl Rate	Turn Rate
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[US ft]	[US ft]			[ft]	[°]	[°/100ft]	[°/100ft]	[°/100ft]
2435.00	0.590	3.780	2434.29	5.43	3.91	3.91	1768634.05	14581176.75	40°08'54.9629"N	80°32'28.2076"W	20.73	79.130	0.35	0.32	18.68
2525.00	0.660	348.320	2524.29	4.52	4.88	20.28	1768633.97	14581177.72	40°08'54.9724"N	80°32'28.2085"W	20.86	76.474	0.20	0.20	-17.18
2616.00	0.860	357.750	2615.28	3.39	6.07	20.15	1768633.84	14581178.91	40°08'54.9843"N	80°32'28.2101"W	21.04	73.223	0.26	0.22	10.36
2707.00	0.870	348.170	2706.27	2.10	7.43	19.98	1768633.67	14581180.27	40°08'54.9977"N	80°32'28.2122"W	21.32	69.594	0.16	0.01	-10.53
2797.00	0.850	0.700	2796.26	0.84	8.77	19.85	1768633.54	14581181.61	40°08'55.0109"N	80°32'28.2138"W	21.70	66.163	0.21	-0.02	13.92
2888.00	0.850	335.720	2887.25	-0.44	10.06	19.58	1768633.27	14581182.90	40°08'55.0237"N	80°32'28.2172"W	22.01	62.806	0.40	0.00	-27.45
2978.00	0.870	324.590	2977.24	-1.78	11.23	18.91	1768632.60	14581184.06	40°08'55.0352"N	80°32'28.2257"W	21.99	59.305	0.19	0.02	-12.37
3069.00	0.970	318.250	3068.23	-3.20	12.36	18.00	1768631.69	14581185.20	40°08'55.0465"N	80°32'28.2374"W	21.83	55.511	0.16	0.11	-6.97
3160.00	1.110	329.250	3159.21	-4.82	13.69	17.03	1768630.73	14581186.53	40°08'55.0597"N	80°32'28.2497"W	21.85	51.198	0.27	0.15	12.09
3250.00	0.370	174.860	3249.21	-5.42	-14.15	-16.61	1768630.31	14581186.99	40°08'55.0643"N	80°32'28.2551"W	21.82	49.567	-1.61	-0.82	-171.54
3341.00	0.700	202.700	3340.20	-4.78	13.35	16.42	1768630.12	14581186.18	40°08'55.0563"N	80°32'28.2576"W	21.16	50.896	0.45	0.36	30.59
3422.00	0.590	199.440	3431.19	-4.09	12.39	16.05	1768629.75	14581185.23	40°08'55.0469"N	80°32'28.2624"W	20.28	52.329	0.13	-0.12	-3.58
3522.00	0.910	51.350	3521.19	-3.92	12.40	16.46	1768630.15	14581185.24	40°08'55.0470"N	80°32'28.2572"W	20.61	52.995	1.61	0.36	-164.54
3613.00	3.120	50.230	3612.13	-4.66	14.44	18.93	1768632.62	14581187.27	40°08'55.0670"N	80°32'28.2253"W	23.81	52.657	2.43	2.43	-1.23
3703.00	4.520	47.420	3701.93	-6.25	18.41	23.42	1768637.11	14581191.24	40°08'55.1060"N	80°32'28.1671"W	29.79	51.835	1.57	1.56	-3.12
3794.00	6.080	45.400	3792.54	-8.81	24.22	29.49	1768643.18	14581197.05	40°08'55.1631"N	80°32'28.0886"W	38.16	50.609	1.73	1.71	-2.22
3885.00	7.220	36.130	3882.93	-13.01	32.22	36.30	1768649.98	14581205.05	40°08'55.2418"N	80°32'28.0004"W	48.53	48.404	1.72	1.25	-10.19
3975.00	8.390	32.280	3972.09	-19.09	42.34	43.14	1768656.82	14581215.16	40°08'55.3415"N	80°32'27.9116"W	60.44	45.535	1.42	1.30	-4.28
4066.00	9.840	28.780	4061.94	-27.06	54.77	50.43	1768664.11	14581227.59	40°08'55.4639"N	80°32'27.8169"W	74.45	42.637	1.71	1.59	-3.85
4157.00	11.850	25.840	4151.31	-37.31	69.99	58.24	1768671.92	14581242.81	40°08'55.6140"N	80°32'27.7153"W	91.06	39.764	2.29	2.21	-3.23
4248.00	13.550	27.450	4240.08	-49.41	87.87	67.23	1768680.90	14581260.67	40°08'55.7901"N	80°32'27.5984"W	110.64	37.422	1.91	1.87	1.77
4338.00	15.210	32.780	4327.26	-61.80	107.15	78.48	1768692.15	14581279.95	40°08'55.9801"N	80°32'27.4522"W	132.82	36.222	2.36	1.84	5.92
4429.00	17.400	38.220	4414.60	-73.89	127.88	93.37	1768707.03	14581300.67	40°08'56.1842"N	80°32'27.2591"W	158.34	36.134	2.93	2.41	5.98
4519.00	19.920	41.310	4499.87	-85.63	149.97	111.82	1768725.48	14581322.75	40°08'56.4016"N	80°32'27.0200"W	187.07	36.708	3.01	2.80	3.43
4610.00	22.710	39.470	4584.64	-98.88	175.18	133.22	1768746.87	14581347.96	40°08'56.6496"N	80°32'26.7427"W	220.08	37.252	3.15	3.07	-2.02
4701.00	24.530	38.520	4668.01	-114.27	203.52	156.16	1768769.80	14581376.29	40°08'56.9285"N	80°32'26.4455"W	256.53	37.497	2.04	2.00	-1.04
4792.00	26.760	37.350	4750.04	-131.56	234.59	180.35	1768793.98	14581407.34	40°08'57.2343"N	80°32'26.1319"W	295.91	37.552	2.51	2.45	-1.29
4882.00	26.890	36.860	4830.35	-149.90	266.98	204.85	1768818.47	14581439.72	40°08'57.5531"N	80°32'25.8142"W	336.52	37.498	0.29	0.14	-0.54
4973.00	27.740	37.310	4911.21	-168.77	300.30	230.03	1768843.65	14581473.02	40°08'57.8810"N	80°32'25.4877"W	378.28	37.453	0.96	0.93	0.49
5064.00	29.250	37.350	4991.18	-188.22	334.82	256.36	1768869.96	14581507.53	40°08'58.2208"N	80°32'25.1464"W	421.69	37.440	1.66	1.66	0.04

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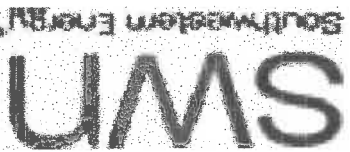
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(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)			(ft)	(°)	(%/100ft)	(%/100ft)	(%/100ft)
5154.00	29.480	34.760	5069.62	-208.87	370.49	282.33	1768895.92	14581543.19	40°08'58.5720"N	80°32'24.8096"W	465.80	37.309	1.43	-2.88	
5245.00	27.910	35.470	5149.44	-229.94	406.23	307.45	1768921.04	14581578.92	40°08'58.9239"N	80°32'24.4837"W	509.46	37.120	1.77	-1.73	0.78
5336.00	28.160	35.540	5229.76	-250.32	441.05	332.29	1768945.87	14581613.72	40°08'59.2667"N	80°32'24.1615"W	552.22	36.995	0.28	0.27	0.08
5426.00	27.120	35.430	5309.49	-270.22	475.05	356.53	1768970.09	14581647.71	40°08'59.6014"N	80°32'23.8471"W	593.96	36.889	1.16	-1.16	-0.12
5517.00	26.130	36.580	5390.84	-289.33	508.04	380.50	1768994.05	14581680.69	40°08'59.9262"N	80°32'23.5362"W	634.73	36.831	1.23	-1.09	1.26
5607.00	24.880	36.420	5472.07	-307.19	539.19	403.55	1769017.10	14581711.82	40°09'0.2329"N	80°32'23.2373"W	673.48	36.812	1.39	-1.39	-0.18
5698.00	22.840	51.170	5555.36	-319.96	565.70	428.70	1769042.23	14581738.32	40°09'0.4935"N	80°32'22.9117"W	709.78	37.156	6.91	-2.24	16.21
5789.00	22.640	64.870	5639.35	-323.59	584.22	458.33	1769071.86	14581756.84	40°09'0.6751"N	80°32'22.5288"W	742.55	38.115	5.81	-0.22	15.05
5879.00	21.290	79.900	5722.88	-318.82	594.45	490.13	1769103.64	14581767.06	40°09'0.7745"N	80°32'22.1187"W	770.45	39.506	6.41	-1.50	16.70
5970.00	21.380	93.430	5807.70	-306.11	596.36	522.97	1769136.47	14581768.97	40°09'0.7917"N	80°32'21.6956"W	793.18	41.249	5.40	-0.10	14.87
6060.00	23.450	108.470	5890.96	-285.46	589.70	556.36	1769169.85	14581762.31	40°09'0.7242"N	80°32'21.2660"W	810.73	43.334	6.75	2.30	16.71
6151.00	26.040	121.210	5973.66	-255.94	573.59	590.65	1769204.13	14581744.22	40°09'0.5633"N	80°32'20.4326"W	823.34	45.839	6.50	2.85	14.00
6242.00	25.230	135.870	6055.78	-220.66	549.30	621.27	1769234.73	14581721.93	40°09'0.3216"N	80°32'20.4329"W	829.28	48.518	7.01	-0.89	16.11
6287.00	24.060	143.670	6096.69	-202.51	535.02	633.39	1769246.84	14581707.66	40°09'0.1799"N	80°32'20.2778"W	829.11	49.812	7.68	-2.60	17.33
6311.00	24.730	145.450	6118.55	-192.73	526.94	639.13	1769252.59	14581699.58	40°09'0.0998"N	80°32'20.2044"W	828.35	50.496	4.14	-2.79	7.42
6401.00	30.500	147.170	6198.27	-151.40	492.22	662.21	1769275.66	14581664.87	40°08'59.7555"N	80°32'19.9095"W	825.11	53.377	6.47	6.41	1.91
6492.00	39.780	150.140	6272.61	-99.30	447.46	689.29	1769302.72	14581620.13	40°08'59.3118"N	80°32'19.5638"W	821.79	57.010	10.37	10.20	3.26
6537.00	43.830	152.640	6306.15	-69.35	421.13	703.62	1769317.05	14581593.81	40°08'59.0508"N	80°32'19.3810"W	820.02	59.099	9.73	9.00	5.56
6583.00	47.910	155.390	6338.17	-36.34	391.45	718.06	1769331.48	14581564.14	40°08'58.7568"N	80°32'19.1970"W	817.83	61.403	9.85	8.87	5.98
6628.00	52.590	156.500	6366.94	-1.78	359.86	732.15	1769345.57	14581532.56	40°08'58.4439"N	80°32'19.0177"W	815.80	63.825	10.57	10.40	2.47
6673.00	57.310	157.700	6392.77	35.00	325.93	746.47	1769359.88	14581498.65	40°08'58.1079"N	80°32'18.8356"W	814.52	66.412	10.71	10.49	2.67
6719.00	62.580	159.100	6418.81	74.67	288.92	761.11	1769374.51	14581461.65	40°08'57.7414"N	80°32'18.6496"W	814.10	69.213	11.76	11.46	3.04
6764.00	67.710	160.610	6434.71	115.27	250.60	775.15	1769388.56	14581423.34	40°08'57.3620"N	80°32'18.4712"W	814.65	72.085	11.80	11.40	3.36
6809.00	72.150	161.890	6450.15	157.19	210.58	788.73	1769402.13	14581383.34	40°08'56.9659"N	80°32'18.2991"W	816.36	75.051	10.22	9.87	2.84
6854.00	76.900	163.140	6462.16	200.06	169.23	801.75	1769415.14	14581342.00	40°08'56.5565"N	80°32'18.1342"W	819.42	78.081	10.89	10.56	2.78
6900.00	81.020	162.420	6470.97	244.66	126.11	815.11	1769428.50	14581298.91	40°08'56.1298"N	80°32'17.9649"W	824.81	81.205	9.09	8.96	-1.57
6945.00	85.160	160.250	6476.38	288.95	83.80	829.41	1769442.79	14581256.61	40°08'55.7109"N	80°32'17.7837"W	833.63	84.230	10.37	9.20	-4.82
6990.00	89.940	160.590	6478.30	333.61	41.46	844.47	1769457.85	14581214.28	40°08'55.2917"N	80°32'17.5925"W	845.49	87.190	10.65	10.62	0.76
7036.00	89.750	159.200	6478.43	379.36	-1.74	860.28	1769473.66	14581171.10	40°08'54.8640"N	80°32'17.3918"W	860.29	90.116	3.05	-0.41	-3.02
7126.00	90.090	157.270	6478.55	469.11	-85.32	893.66	1769507.01	14581087.55	40°08'54.0364"N	80°32'16.9677"W	897.72	95.454	2.18	0.38	-2.14

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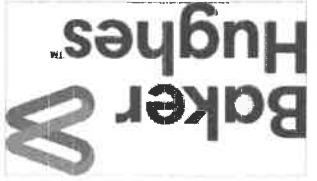


SOUTHWESTERN ENERGY

REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY
Field	Ohio
Facility	Gary Kestner OHI Pad
Slot	Slot #210
	Wellbore
	AP/Legal
	Gary Kestner OHI 210H

Actual Wellpath Report
Gary Kestner OHI 210H AWP Proj: 20475



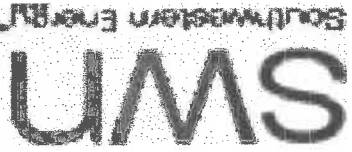
WELLPATH DATA (238 stations)

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)	(°N)	(°W)	(ft)	(°)	(%/100ft)	(%/100ft)	(%/100ft)
7217.00	89.230	156.460	6479.09	560.02	-168.68	930.14	176543.48	14581004.22	40°08'53.2107"N	80°32'16.5035"W	945.31	100.279	2.20	-0.96	-1.99
7307.00	89.820	156.560	6479.84	649.96	-250.90	966.73	1769580.05	14580922.03	40°08'52.3964"N	80°32'16.0378"W	998.75	104.549	1.39	0.66	-1.22
7398.00	89.050	155.640	6480.74	740.89	-334.09	1003.59	1769616.91	14580838.87	40°08'51.5724"N	80°32'15.5687"W	1057.74	108.412	1.32	-0.85	-1.01
7489.00	89.880	155.050	6481.58	831.85	-416.79	1041.55	1769654.85	14580756.21	40°08'50.7532"N	80°32'15.0854"W	1121.85	111.810	1.12	0.91	-0.65
7579.00	89.140	153.470	6482.35	921.84	-497.86	1080.63	1769693.92	14580675.17	40°08'49.9501"N	80°32'14.5876"W	1189.80	114.736	1.94	-0.82	-1.76
7670.00	89.230	157.170	6483.65	1012.79	-580.52	1118.62	1769731.89	14580592.54	40°08'49.1313"N	80°32'14.1040"W	1260.28	117.428	4.07	0.10	4.07
7761.00	88.950	154.530	6485.09	1103.72	-663.54	1155.84	1769769.10	14580509.56	40°08'48.3090"N	80°32'13.6302"W	1332.76	119.859	2.92	-0.31	-2.90
7851.00	88.950	156.950	6486.74	1193.66	-745.57	1192.81	1769806.05	14580427.56	40°08'47.4964"N	80°32'13.1596"W	1406.65	122.008	2.69	0.00	2.69
7942.00	90.180	158.750	6487.44	1284.44	-829.85	1227.12	1769840.35	14580343.31	40°08'46.6619"N	80°32'12.7235"W	1481.37	124.069	2.40	1.35	1.98
8032.00	89.080	154.890	6488.02	1374.31	-912.56	1262.64	1769875.75	14580260.63	40°08'45.8426"N	80°32'12.2730"W	1557.81	125.859	4.46	-1.22	-4.29
8123.00	89.450	159.840	6489.18	1465.11	-996.11	1297.54	1769910.75	14580176.70	40°08'45.0112"N	80°32'11.8279"W	1636.05	127.524	5.45	0.41	5.44
8214.00	89.940	157.390	6489.67	1555.80	-1081.25	1330.72	1769943.91	14580092.01	40°08'44.1722"N	80°32'11.4063"W	1714.62	129.095	2.75	0.54	-2.69
8304.00	88.620	157.950	6490.80	1645.60	-1164.49	1364.91	1769978.09	14580008.80	40°08'43.3478"N	80°32'10.9716"W	1794.16	130.469	1.59	-1.47	0.62
8395.00	89.850	157.690	6492.02	1736.38	-1248.75	1399.26	1770012.43	14579924.57	40°08'42.5135"N	80°32'10.5350"W	1875.45	131.747	1.38	1.36	-0.29
8485.00	88.770	157.160	6493.10	1826.21	-1331.84	1433.81	1770046.96	14579841.51	40°08'41.6905"N	80°32'10.0957"W	1956.94	132.888	1.34	-1.20	-0.59
8576.00	90.680	158.310	6493.54	1917.00	-1416.05	1468.29	1770081.43	14579757.33	40°08'40.8666"N	80°32'9.6574"W	2039.87	133.962	2.45	2.10	1.26
8666.00	88.740	155.410	6493.99	2006.87	-1498.80	1503.65	1770116.77	14579674.62	40°08'40.0371"N	80°32'9.2076"W	2123.05	134.907	3.88	-2.16	-3.22
8757.00	89.910	159.360	6495.06	2097.68	-1582.78	1538.63	1770151.74	14579590.67	40°08'39.2054"N	80°32'8.7628"W	2207.39	135.810	4.53	1.29	4.34
8848.00	90.580	156.660	6494.67	2188.45	-1667.15	1572.70	1770185.80	14579506.33	40°08'38.3699"N	80°32'8.3298"W	2291.89	136.670	3.06	0.74	-2.97
8938.00	88.950	157.410	6495.04	2278.31	-1750.01	1607.82	1770220.90	14579423.50	40°08'37.5492"N	80°32'7.8832"W	2376.47	137.425	1.99	-1.81	0.83
9029.00	90.430	158.740	6495.54	2369.07	-1834.42	1641.79	1770254.86	14579339.12	40°08'36.7133"N	80°32'7.4514"W	2461.83	138.172	2.19	1.63	1.46
9120.00	88.990	158.390	6496.08	2459.92	-1918.21	1677.25	1770290.31	14579255.36	40°08'35.8835"N	80°32'7.0005"W	2548.08	138.834	4.05	-1.69	-3.68
9210.00	88.150	158.150	6498.40	2549.77	-2000.88	1712.73	1770325.77	14579172.73	40°08'35.0647"N	80°32'6.5492"W	2633.81	139.437	3.17	-0.82	3.07
9301.00	91.170	159.400	6498.94	2640.43	-2085.70	1745.67	1770358.70	14579087.94	40°08'34.2249"N	80°32'6.1308"W	2719.83	140.072	3.59	3.32	1.37
9392.00	89.780	157.530	6498.19	2731.14	-2170.33	1779.07	1770392.09	14579003.34	40°08'33.3868"N	80°32'5.7064"W	2806.32	140.658	2.56	-1.53	-2.05
9482.00	88.710	156.860	6499.37	2820.99	-2253.29	1813.95	1770426.96	14578920.41	40°08'32.5652"N	80°32'5.2629"W	2892.70	141.165	1.40	-1.19	-0.74
9573.00	89.660	157.490	6500.67	2911.83	-2337.15	1849.25	1770462.24	14578836.58	40°08'31.7346"N	80°32'4.8140"W	2980.27	141.648	1.25	1.04	0.69
9664.00	88.950	157.540	6501.77	3002.65	-2421.23	1884.05	1770497.02	14578752.54	40°08'30.9020"N	80°32'4.3716"W	3067.90	142.112	0.78	-0.78	0.05
9754.00	89.720	158.190	6502.82	3092.43	-2504.59	1917.95	1770530.92	14578669.21	40°08'30.0765"N	80°32'3.9406"W	3154.60	142.556	1.12	0.86	0.72
9845.00	87.940	158.140	6504.67	3183.16	-2589.04	1951.79	1770564.74	14578584.79	40°08'29.2402"N	80°32'3.5106"W	3242.32	142.889	1.96	-1.96	-0.05

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SOUTHWESTERN ENERGY

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Field	Ohio
Facility	Gary Kestner OHI Pad
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	Wellbore
	Gary Kestner OHI 210H AWB
	AP/Legal
	Well
	Gary Kestner OHI 210H

Actual Wellpath Report

Gary Kestner OHI 210H AWP Proj: 20475

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MD (ft)	Inclination (°)	Azimuth (ft)	TVD (ft)	Vert Sect (ft)	North (ft)	East (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	Closure Dist (ft)	Closure Dir (°)	DLS (%/100ft)	Build Rate (%/100ft)	Turn Rate (%/100ft)
9935.00	89.290	157.300	6506.85	3272.94	-2672.29	1985.90	1770598.84	14578501.57	40°08'28.4157"N	80°32'3.0770"W	3329.41	143.382	1.77	1.50	-0.93
10026.00	89.110	155.350	6508.12	-2755.62	3363.85	2022.44	1770635.36	14578418.27	40°08'27.5904"N	80°32'2.6122"W	3418.15	143.724	2.15	-0.20	-2.14
10117.00	88.950	158.680	6509.66	-2839.37	3454.69	2057.96	1770670.87	14578334.55	40°08'26.7609"N	80°32'2.1605"W	3506.74	144.066	3.66	-0.18	3.66
10207.00	89.260	158.050	6511.07	-2923.02	3544.41	2091.14	1770704.04	14578250.94	40°08'25.9326"N	80°32'1.7389"W	3594.01	144.420	0.78	0.34	-0.70
10298.00	89.140	157.010	6512.34	-3007.11	3635.22	2125.92	1770738.80	14578166.89	40°08'25.0999"N	80°32'1.2968"W	3682.69	144.741	1.15	-0.13	-1.14
10389.00	90.030	157.330	6513.00	-3090.97	3726.08	2161.22	1770774.10	14578083.05	40°08'24.2693"N	80°32'0.8479"W	3771.60	145.039	1.04	0.98	0.35
10479.00	89.690	158.530	6513.22	-3174.38	3815.86	2195.04	1770807.90	14577999.68	40°08'23.4433"N	80°32'0.4181"W	3859.39	145.337	1.39	-0.38	1.33
10570.00	89.910	156.640	6513.53	-3258.50	3906.67	2229.74	1770842.58	14577915.59	40°08'22.6103"N	80°31'59.9771"W	3948.36	145.617	2.09	0.24	-2.08
10661.00	90.620	158.060	6513.11	-3342.47	3997.51	2264.78	1770877.61	14577831.65	40°08'21.7786"N	80°31'59.5315"W	4037.50	145.879	1.74	0.78	1.56
10752.00	90.120	158.320	6512.52	-3426.96	4088.26	2298.59	1770911.41	14577747.19	40°08'20.9420"N	80°31'59.1019"W	4126.45	146.149	0.62	-0.55	0.29
10842.00	90.830	156.870	6511.78	-3510.16	4178.07	2332.89	1770945.70	14577664.03	40°08'20.1180"N	80°31'58.6659"W	4214.69	146.392	1.79	0.79	-1.61
10933.00	90.370	159.090	6510.87	-3594.51	4268.83	2401.05	1771013.83	14577496.43	40°08'19.2827"N	80°31'57.7997"W	4303.86	146.635	2.51	-0.57	2.44
11023.00	89.970	156.450	6509.99	-3677.81	4358.62	2435.78	1771048.55	14577412.37	40°08'18.4577"N	80°31'57.3582"W	4392.19	146.862	2.96	-0.38	-2.93
11114.00	90.860	158.670	6509.99	-3761.92	4449.43	2473.57	1771086.32	14577329.70	40°08'17.6248"N	80°31'57.3582"W	4481.63	147.078	2.63	0.98	2.44
11205.00	87.230	152.220	6511.51	-3844.62	4540.33	2513.51	1771126.24	14577249.12	40°08'16.8056"N	80°31'56.8773"W	4571.61	147.243	8.13	-3.99	-7.09
11295.00	90.150	155.060	6513.57	-3925.22	4630.28	2554.48	1771167.20	14577167.95	40°08'15.2024"N	80°31'55.8465"W	4661.02	147.367	4.53	3.24	3.16
11386.00	87.450	151.390	6515.48	-4006.43	4721.23	2595.27	1771207.98	14577086.70	40°08'14.3970"N	80°31'55.3268"W	4751.51	147.479	5.01	-2.97	-4.03
11477.00	89.420	155.310	6517.96	-4087.71	4812.17	2633.73	1771246.42	14577005.38	40°08'13.5912"N	80°31'54.8371"W	4841.98	147.589	4.82	2.16	4.31
11567.00	88.400	154.080	6519.67	-4169.06	4902.14	2672.49	1771285.17	14576923.11	40°08'12.7759"N	80°31'54.3436"W	4931.29	147.718	1.78	-1.13	-1.37
11658.00	88.860	155.480	6521.85	-4251.36	4993.11	2709.64	1771322.30	14576841.20	40°08'11.9642"N	80°31'53.8709"W	5021.58	147.846	1.62	0.51	1.54
11748.00	88.210	155.750	6524.15	-4333.30	5083.04	2746.33	1771358.98	14576758.00	40°08'11.1398"N	80°31'53.4041"W	5110.74	148.125	1.08	0.37	1.01
11839.00	88.550	156.670	6526.72	-4416.53	5173.93	2781.19	1771393.82	14576673.99	40°08'10.3075"N	80°31'52.9611"W	5200.78	148.125	1.08	0.78	1.77
11930.00	89.260	158.280	6528.46	-4500.57	5264.74	2815.26	1771427.88	14576590.73	40°08'9.4826"N	80°31'52.5280"W	5290.57	148.285	1.93	0.78	1.77
12020.00	89.880	157.220	6529.14	-4583.87	5354.54	2849.62	1771462.23	14576506.50	40°08'8.6481"N	80°31'52.0913"W	5379.36	148.443	1.36	0.69	-1.18
12111.00	90.180	158.410	6529.09	-4668.13	5445.33	2884.10	1771496.69	14576423.40	40°08'8.2248"N	80°31'51.6531"W	5469.17	148.598	1.35	0.33	1.31
12201.00	89.720	156.540	6529.17	-4751.26	5535.15	2920.75	1771533.33	14576340.14	40°08'7.8248"N	80°31'51.1869"W	5558.10	148.742	2.14	-0.51	-2.08
12292.00	90.280	155.960	6529.17	-4834.55	5626.08	2957.60	1771570.16	14576258.06	40°08'6.1865"N	80°31'50.7181"W	5648.33	148.862	0.89	0.62	-0.64
12382.00	89.230	155.700	6529.55	-4916.03	5716.03	2993.63	1771606.18	14576174.54	40°08'5.3590"N	80°31'50.2599"W	5737.68	148.971	1.20	-1.17	-0.29
12473.00	89.630	157.650	6530.46	-5000.22	5806.92	3027.40	1771639.94	14576090.08	40°08'4.5222"N	80°31'49.8308"W	5827.86	149.091	2.19	0.44	2.14
12564.00	89.660	158.780	6531.02	-5084.71	5897.66	3074.40	1771684.71	14576009.08	40°08'4.5222"N	80°31'49.8308"W	5917.72	149.231	1.24	0.03	1.24

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(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(US ft)	(US ft)	(ft)	(ft)	(ft)	(°)	(%/100ft)	(%/100ft)	(%/100ft)
12654.00	90.000	160.370	6531.29	5987.23	-5169.04	3058.83	1771671.36	14576005.78	40°08'3.6872"N	80°31'49.4318"W	6006.28	149.385	1.76	0.38	1.72
12745.00	89.970	157.470	6531.31	6077.88	-5253.93	3091.59	1771704.10	14575920.92	40°08'2.8466"N	80°31'49.0159"W	6096.04	149.526	3.14	-0.03	-3.14
12835.00	90.340	159.170	6531.07	6167.61	-5337.56	3124.84	1771737.34	14575837.32	40°08'2.0185"N	80°31'48.5935"W	6184.99	149.653	1.93	0.41	1.89
12926.00	90.310	160.550	6530.55	6258.13	-5422.99	3156.17	1771768.66	14575751.92	40°08'1.1726"N	80°31'48.1960"W	6274.57	149.801	1.52	-0.03	1.52
13017.00	90.550	157.710	6529.87	6348.74	-5508.01	3188.58	1771801.06	14575666.94	40°08'0.3308"N	80°31'47.7844"W	6364.37	149.933	3.13	0.26	-3.12
13107.00	89.350	156.970	6529.95	6438.58	-5591.06	3223.25	1771835.72	14575583.92	40°07'59.5083"N	80°31'47.3437"W	6453.63	150.036	1.57	-1.33	-0.82
13198.00	90.890	159.750	6529.76	6529.30	-5675.64	3256.81	1771869.26	14575499.38	40°07'58.6707"N	80°31'46.9175"W	6543.67	150.152	3.49	1.69	3.05
13289.00	89.630	157.040	6529.35	6620.02	-5760.23	3290.31	1771902.75	14575414.81	40°07'57.8330"N	80°31'46.4919"W	6633.73	150.264	3.28	-1.38	-2.98
13379.00	89.820	157.120	6529.78	6709.88	-5843.13	3325.36	1771937.79	14575331.95	40°07'57.0120"N	80°31'46.0463"W	6723.11	150.356	0.23	0.21	0.09
13470.00	89.970	157.110	6529.95	6800.74	-5926.96	3360.75	1771973.16	14575248.15	40°07'56.1817"N	80°31'45.5964"W	6813.48	150.446	0.17	-0.16	-0.01
13560.00	89.660	157.230	6530.24	6890.60	-6009.91	3395.67	1772008.07	14575165.23	40°07'55.3602"N	80°31'45.1525"W	6902.87	150.533	0.37	-0.34	0.13
13651.00	90.370	158.040	6530.55	6981.41	-6094.07	3430.29	1772042.68	14575081.11	40°07'54.5268"N	80°31'44.7125"W	6993.18	150.625	1.18	0.78	0.89
13742.00	89.200	155.580	6530.28	7072.29	-6177.71	3466.12	1772078.50	14574997.50	40°07'53.6984"N	80°31'44.2569"W	7083.65	150.705	2.99	-1.29	-2.70
13833.00	91.140	161.960	6530.28	7162.91	-6262.48	3499.06	1772111.42	14574912.76	40°07'52.8589"N	80°31'43.8387"W	7173.71	150.806	7.33	2.13	7.01
13923.00	91.750	156.880	6528.01	7252.45	-6346.68	3530.67	1772143.02	14574828.59	40°07'52.0252"N	80°31'43.4374"W	7262.65	150.913	5.68	3.06	-5.64
14014.00	90.280	157.580	6526.40	7343.28	-6430.58	3565.89	1772178.22	14574744.73	40°07'51.1943"N	80°31'42.9898"W	7353.08	150.991	1.79	-1.62	0.77
14105.00	89.450	157.720	6526.61	7434.09	-6514.74	3600.49	1772212.81	14574660.60	40°07'50.3608"N	80°31'42.5501"W	7443.48	151.072	0.92	-0.91	0.15
14195.00	89.420	157.530	6527.50	7523.90	-6597.96	3634.75	1772247.06	14574577.41	40°07'49.5366"N	80°31'42.1147"W	7532.89	151.150	0.21	-0.03	-0.21
14286.00	89.350	156.800	6528.48	7614.75	-6681.82	3670.06	1772282.36	14574493.58	40°07'48.7060"N	80°31'41.6658"W	7623.39	151.222	0.81	-0.08	-0.80
14377.00	89.690	157.660	6529.24	7705.60	-6765.72	3705.28	1772317.56	14574409.71	40°07'47.8751"N	80°31'41.2181"W	7713.89	151.292	-1.02	-0.37	0.95
14467.00	89.780	157.250	6529.66	7795.43	-6848.85	3739.79	1772352.05	14574326.62	40°07'47.0518"N	80°31'40.7796"W	7803.38	151.363	0.47	0.10	-0.46
14558.00	90.620	158.370	6529.34	7886.22	-6933.10	3774.15	1772386.41	14574242.39	40°07'46.2174"N	80°31'40.3429"W	7893.81	151.438	1.54	0.92	1.23
14649.00	89.290	157.540	6529.41	7976.99	-7017.45	3808.31	1772420.55	14574158.08	40°07'45.3821"N	80°31'39.9090"W	7984.22	151.512	1.72	-1.46	-0.91
14739.00	90.180	158.380	6529.83	8066.77	-7100.87	3842.08	1772454.31	14574074.69	40°07'44.5560"N	80°31'39.4799"W	8073.66	151.583	1.36	0.99	0.93
14830.00	90.550	157.290	6529.25	8157.56	-7185.14	3876.41	1772488.63	14573990.45	40°07'43.7214"N	80°31'39.0437"W	8164.12	151.653	1.26	-0.41	-1.20
14921.00	90.430	157.940	6528.47	8248.37	-7269.28	3911.07	1772523.27	14573906.35	40°07'42.8881"N	80°31'38.6034"W	8254.63	151.719	0.73	-0.13	0.71
15011.00	90.120	158.490	6528.04	8338.12	-7352.85	3944.47	1772556.65	14573822.81	40°07'42.0605"N	80°31'38.1791"W	8344.05	151.788	0.70	-0.34	0.61
15102.00	90.180	157.740	6527.80	8428.87	-7437.29	3978.39	1772590.56	14573738.40	40°07'41.2243"N	80°31'37.7482"W	8434.50	151.857	0.83	0.07	-0.82
15193.00	90.280	156.990	6527.43	8519.71	-7521.28	4013.41	1772625.57	14573654.44	40°07'40.3925"N	80°31'37.3031"W	8525.09	151.915	0.83	0.11	-0.82
15283.00	90.090	158.260	6527.14	8609.52	-7604.50	4047.67	1772659.81	14573571.25	40°07'39.5683"N	80°31'36.8678"W	8614.64	151.975	1.43	-0.21	1.41

WELLPATH DATA (238 stations)

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MV Department of
Environmental Protection



Southwestern Energy

REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY
Field	Ohio
Facility	Gary Kestner OHI Pad
Slot	Slot #210
Well	Gary Kestner OHI 210H
API/Legal	Wellbore
	Gary Kestner OHI 210H AWB

Actual Wellpath Report

Gary Kestner OHI 210H AWP Proj: 20475

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MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate
15374.00	89.910	156.780	6527.14	8700.35	-7688.59	4082.46	1772694.60	14573487.20	40°07'38.7356"N	80°31'36.4256"W	8705.22	152.033	1.64	-0.20	-1.63
15464.00	90.090	157.170	6527.14	8790.22	-7711.42	4117.66	1772729.78	14573404.40	40°07'37.9152"N	80°31'35.9781"W	8794.89	152.083	0.48	0.20	0.43
15555.00	90.180	158.790	6526.93	8880.99	-7855.77	4151.78	1772763.89	14573320.08	40°07'37.0798"N	80°31'35.5447"W	8885.41	152.144	1.78	0.10	1.78
15646.00	89.420	157.960	6527.25	8971.72	-7940.37	4185.31	1772797.41	14573235.51	40°07'36.2421"N	80°31'35.1188"W	8975.87	152.207	1.24	-0.84	-0.91
15736.00	89.170	156.320	6528.35	9061.57	-8023.29	4220.27	1772832.36	14573152.62	40°07'35.4208"N	80°31'34.6744"W	9065.53	152.255	1.84	-0.28	-1.82
15827.00	90.430	157.780	6528.67	9152.43	-8107.08	4255.76	1772867.82	14573068.86	40°07'34.5909"N	80°31'34.2234"W	9156.21	152.303	2.12	1.38	1.60
15918.00	89.290	159.360	6528.89	9243.13	-8191.79	4289.00	1772901.06	14572984.19	40°07'33.7521"N	80°31'33.8013"W	9246.67	152.365	2.14	-1.25	1.74
16008.00	90.620	157.290	6528.96	9332.86	-8275.42	4322.24	1772934.28	14572900.59	40°07'32.9239"N	80°31'33.3791"W	9336.18	152.422	2.73	1.48	-2.30
16099.00	89.750	157.180	6528.67	9423.71	-8359.33	4357.45	1772969.48	14572816.72	40°07'32.0929"N	80°31'32.9316"W	9426.86	152.468	0.96	-0.96	-0.12
16190.00	90.060	158.110	6528.82	9514.52	-8443.49	4392.06	1773004.08	14572732.59	40°07'31.2594"N	80°31'32.4918"W	9517.49	152.518	1.08	0.34	1.02
16280.00	89.660	158.210	6529.04	9604.28	-8527.03	4425.54	1773037.64	14572649.08	40°07'30.4321"N	80°31'32.0666"W	9607.06	152.571	0.46	-0.44	0.11
16371.00	89.170	155.030	6529.97	9695.16	-8610.54	4461.65	1773073.64	14572565.60	40°07'29.6049"N	80°31'31.6075"W	9697.82	152.609	3.54	-0.54	-3.49
16462.00	89.850	157.410	6530.75	9786.08	-8693.80	4498.34	1773110.31	14572482.37	40°07'28.7801"N	80°31'31.1410"W	9788.63	152.642	2.72	0.75	2.62
16553.00	88.920	154.060	6531.73	9877.02	-8776.75	4535.73	1773147.69	14572399.46	40°07'27.9585"N	80°31'30.6654"W	9879.48	152.671	3.82	-1.02	-3.68
16643.00	89.480	154.610	6532.98	9967.00	-8857.86	4574.70	1773186.65	14572318.38	40°07'27.1549"N	80°31'30.1692"W	9969.43	152.686	0.87	0.62	0.61
16734.00	88.990	157.300	6534.20	10057.93	-8940.95	4611.77	1773223.71	14572235.32	40°07'26.3319"N	80°31'29.6977"W	10060.27	152.715	3.00	-0.54	2.96
16825.00	89.080	154.260	6535.73	10148.86	-9023.92	4649.10	1773261.02	14572152.38	40°07'25.5100"N	80°31'29.2230"W	10151.12	152.743	3.34	0.10	-3.34
16915.00	89.660	156.080	6536.72	10238.83	-9105.59	4686.89	1773298.79	14572070.74	40°07'24.7010"N	80°31'28.7421"W	10241.03	152.764	2.12	0.64	2.02
17006.00	90.250	155.270	6536.79	10329.79	-9188.51	4724.37	1773336.26	14571987.85	40°07'23.8796"N	80°31'28.2653"W	10331.91	152.790	1.10	0.65	-0.89
17097.00	89.820	155.840	6536.74	10420.75	-9271.35	4762.03	1773373.90	14571905.04	40°07'23.0589"N	80°31'27.7863"W	10422.80	152.814	0.78	-0.47	0.63
17187.00	89.780	154.790	6537.05	10510.73	-9353.12	4799.61	1773411.47	14571823.30	40°07'22.2489"N	80°31'27.3081"W	10512.72	152.835	1.17	-0.04	-1.17
17278.00	89.420	154.940	6537.63	10601.71	-9435.50	4838.26	1773450.11	14571740.95	40°07'21.4327"N	80°31'26.8162"W	10603.66	152.853	0.43	-0.40	0.16
17369.00	89.020	155.000	6538.99	10692.64	-9518.61	4875.32	1773487.15	14571657.88	40°07'20.6096"N	80°31'26.3450"W	10694.51	152.879	2.31	-0.44	2.26
17459.00	89.630	156.830	6539.99	10782.51	-9601.39	4910.60	1773522.42	14571575.13	40°07'19.7896"N	80°31'25.8965"W	10784.28	152.913	0.70	0.66	-0.19
17550.00	89.820	159.120	6540.42	10873.28	-9685.74	4944.72	1773556.53	14571490.81	40°07'18.9542"N	80°31'25.4631"W	10874.92	152.955	2.53	0.21	2.52
17641.00	89.380	157.780	6541.06	10964.00	-9770.38	4978.15	1773589.94	14571406.20	40°07'18.1161"N	80°31'25.0387"W	10965.50	153.001	1.55	-0.48	-1.47
17731.00	89.200	157.620	6542.17	11053.80	-9853.64	5012.30	1773624.08	14571322.97	40°07'17.2915"N	80°31'24.6048"W	11055.20	153.039	0.27	-0.20	-0.18
17822.00	90.400	156.740	6542.49	11144.65	-9937.52	5047.59	1773659.35	14571239.13	40°07'16.4608"N	80°31'24.1563"W	11145.96	153.072	1.64	1.32	-0.97
17913.00	88.150	157.690	6543.64	11235.49	-10021.40	5082.83	1773694.58	14571155.28	40°07'15.6300"N	80°31'23.7086"W	11236.71	153.106	2.68	-2.47	1.04
18003.00	89.350	157.270	6545.61	11325.30	-10104.52	5117.29	1773729.03	14571072.19	40°07'14.8068"N	80°31'23.2707"W	11326.42	153.141	1.41	1.33	-0.47

WELLPATH DATA (238 stations)

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AUG 14 2020

WV Department of
Environmental Protection

REFERENCE WELLPATH IDENTIFICATION

Operator	SOUTHWESTERN ENERGY
Field	Ohio
Facility	Gary Kestner OHI Pad
Slot	Slot #210
	Gary Kestner OHI 210H AWB
	Wellbore
	API/Legal
	Gary Kestner OHI 210H
	Well

Actual Wellpath Report
Gary Kestner OHI 210H AWP Proj: 20475

MD	Inclination	Azimuth	TVD	Vert Sect	North	East	Grid East	Grid North	Latitude	Longitude	Closure Dist	Closure Dir	DLS	Build Rate	Turn Rate
[ft]	[°]	[°]	[ft]	[ft]	[ft]	[ft]	[us ft]	[us ft]			[ft]	[°]	[°/100ft]	[°/100ft]	[°/100ft]
18094.00	89.630	158.300	6546.42	11416.09	-10188.76	5151.69	1773763.42	14570987.99	40°07'13.9725"N	80°31'22.8337"W	11417.12	153.178	1.17	0.31	1.13
18185.00	90.060	157.700	6546.66	11506.86	-10273.13	5185.78	1773797.49	14570820.42	40°07'12.3124"N	80°31'21.9666"W	11507.80	153.216	0.81	0.47	-0.66
18275.00	89.510	157.670	6547.00	11596.67	-10356.39	5219.95	1773831.65	14570820.42	40°07'11.4791"N	80°31'21.5262"W	11597.53	153.250	0.61	-0.61	-0.03
18366.00	89.350	157.550	6547.90	11687.48	-10440.53	5254.61	1773866.30	14570736.32	40°07'10.6462"N	80°31'21.0848"W	11688.26	153.284	0.22	-0.18	-0.13
18457.00	89.320	157.550	6548.96	11778.29	-10524.62	5289.36	1773901.03	14570562.25	40°07'09.8228"N	80°31'20.6470"W	11868.77	153.349	0.22	0.18	-0.13
18547.00	89.480	157.430	6549.90	11868.11	-10607.76	5323.82	1773935.48	14570569.14	40°07'08.9903"N	80°31'20.2041"W	11959.53	153.380	0.34	0.33	0.10
18638.00	89.780	157.520	6550.49	11958.94	-10691.82	5358.68	1773970.32	14570485.12	40°07'08.1641"N	80°31'19.7755"W	12049.24	153.415	1.02	-0.13	1.01
18819.00	89.660	158.430	6550.93	12048.72	-10775.25	5392.43	1774004.06	14570401.72	40°07'07.3329"N	80°31'19.3285"W	12140.03	153.443	2.57	0.00	-2.57
18910.00	89.940	159.090	6551.79	12230.36	-10943.28	5462.29	1774073.89	14570233.75	40°07'06.4998"N	80°31'18.8879"W	12230.78	153.474	3.31	0.31	3.30
19000.00	89.350	155.610	6552.35	12320.19	-11026.33	5496.94	1774108.53	14570150.74	40°07'05.6774"N	80°31'18.4476"W	12320.56	153.502	3.92	-0.66	-3.87
19091.00	89.690	156.820	6553.11	12411.11	-11109.59	5533.64	1774145.22	14570067.50	40°07'04.8526"N	80°31'17.9810"W	12411.46	153.522	1.38	0.37	1.33
19182.00	89.970	158.080	6553.38	12501.92	-11193.73	5568.31	1774179.88	14569983.40	40°07'04.0194"N	80°31'17.5405"W	12502.22	153.552	1.74	0.31	1.71
19272.00	89.660	158.080	6553.67	12591.67	-11277.31	5601.69	1774213.25	14569899.86	40°07'03.1916"N	80°31'17.1166"W	12591.93	153.585	0.48	-0.34	-0.33
19363.00	89.260	157.360	6554.53	12682.47	-11361.51	5636.19	1774247.73	14569815.69	40°07'02.3577"N	80°31'16.6784"W	12682.69	153.615	0.91	-0.44	-0.79
19454.00	89.260	157.820	6555.70	12773.28	-11445.63	5670.88	1774282.41	14569731.60	40°07'01.5246"N	80°31'16.2377"W	12773.46	153.643	0.51	0.00	0.51
19544.00	89.170	158.000	6556.94	12863.05	-11529.01	5704.72	1774316.24	14569648.24	40°07'00.6988"N	80°31'15.8079"W	12863.20	153.673	0.22	-0.10	0.20
19635.00	89.200	157.780	6558.23	12953.83	-11613.31	5738.97	1774350.47	14569563.98	40°06'59.8639"N	80°31'15.3729"W	12953.95	153.703	0.24	0.03	-0.24
19725.00	88.800	157.940	6559.80	13043.61	-11696.66	5772.89	1774384.37	14569480.66	40°06'59.0384"N	80°31'14.9422"W	13043.70	153.731	0.48	-0.44	0.18
19816.00	88.770	157.140	6561.73	13134.41	-11780.74	5807.64	1774419.12	14569396.61	40°06'58.2057"N	80°31'14.5007"W	13134.48	153.758	0.88	-0.03	-0.88
19906.00	89.050	157.460	6563.44	13224.24	-11863.76	5842.37	1774453.83	14569313.63	40°06'57.3836"N	80°31'14.0595"W	13224.29	153.782	0.47	0.31	0.36
19997.00	89.020	157.290	6564.97	13315.06	-11947.74	5877.37	1774488.82	14569229.68	40°06'56.5518"N	80°31'13.6148"W	13315.10	153.806	0.19	-0.03	-0.19
20088.00	89.080	158.490	6566.48	13405.83	-12032.03	5911.62	1774523.05	14569145.42	40°06'55.7169"N	80°31'13.1798"W	13405.86	153.834	1.32	0.07	1.32
20178.00	88.890	157.850	6568.08	13495.57	-12115.57	5945.08	1774556.50	14569061.92	40°06'54.8897"N	80°31'12.7550"W	13495.59	153.863	0.74	-0.21	-0.71
20269.00	89.020	157.620	6569.74	13586.36	-12199.77	5979.55	1774590.96	14568977.75	40°06'54.0558"N	80°31'12.3171"W	13586.37	153.889	0.29	0.14	-0.25
20359.00	89.380	158.070	6570.99	13676.14	-12283.12	6013.49	1774624.88	14568894.43	40°06'53.2303"N	80°31'11.8861"W	13676.15	153.915	0.64	0.40	0.50
20450.00	89.110	157.590	6572.19	13766.93	-12367.38	6047.82	1774659.21	14568810.20	40°06'52.3958"N	80°31'11.4500"W	13766.93	153.941	0.61	-0.30	-0.53
20475.00	89.110	157.590	6572.58	13791.87	-12390.49	6057.35	1774668.73	14568787.10	40°06'52.1669"N	80°31'11.3289"W	13791.87	153.947	0.00	0.00	0.00

WELLPATH DATA (238 stations) † = interpolated, ‡ = extrapolated station

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Name	TVD [ft]	North [ft]	East [ft]	Grd East [US ft]	Grd North [US ft]	Latitude	Longitude	Shape
Gary Kestner OHI 210H LP Rev-3	6476.00	2.95	874.63	1769487.99	14581175.78	40°08'54.9096"N	80°32'17.2068"W	point
Gary Kestner OHI 210H BHL Rev-3	6710.00	-12390.18	6057.44	1774668.82	14568787.41	40°06'52.1700"N	80°31'11.3278"W	point
Gary Kestner SE Unit	6999.40	-7368.61	3287.02	1771899.46	14573807.05	40°07'41.9392"N	80°31'46.6439"W	polygon
Gary Kestner SW Unit	6999.40	-7368.61	3287.02	1771899.46	14573807.05	40°07'41.9392"N	80°31'46.6439"W	polygon

2D Polygon: dimensions not calculated

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S	End N/S	Start EW [ft]	End EW [ft]
17.5in Open Hole	26.00	735.00	709.00	26.00	734.92	0.00	0.00	-6.01	3.63
13.375in Casing Intermediate	26.00	735.00	709.00	26.00	734.92	0.00	0.00	-6.01	3.63
12.25in Open Hole	735.00	2045.00	1310.00	734.92	2044.30	-6.01	3.63	1.53	20.93
9.625in Casing Intermediate	26.00	2045.00	2019.00	26.00	2044.30	0.00	0.00	1.53	20.93
8.75in Open Hole	2045.00	6355.00	4310.00	2044.30	6158.05	1.53	20.93	510.89	649.99
8.5in Open Hole	6355.00	20475.00	14120.00	6158.05	6572.58	510.89	649.99	-12390.49	6057.35
5.5in Casing Production	26.00	20475.00	20449.00	26.00	6572.58	0.00	0.00	-12390.49	6057.35

HOLE & CASING SECTIONS - Ret Wellbore: Gary Kestner OHI 210H AWB Ret Wellpath: Gary Kestner OHI 210H AWP Proj: 20475

Operator	Field	Facility	Slot
SOUTHWESTERN ENERGY <td>Ohio <td>Gary Kestner OHI Pad <td>Slot #210</td> </td></td>	Ohio <td>Gary Kestner OHI Pad <td>Slot #210</td> </td>	Gary Kestner OHI Pad <td>Slot #210</td>	Slot #210
Gary Kestner OHI 210H <td>Well <td>Wellbore <td></td> </td></td>	Well <td>Wellbore <td></td> </td>	Wellbore <td></td>	
	AP/Legal <td></td> <td></td>		

REFERENCE WELLPATH IDENTIFICATION



Actual Wellpath Report
Gary Kestner OHI 210H AWP Proj: 20475
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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Well	Gary Kestner OHI 210H
Field	Ohio	API/Legal	
Facility	Gary Kestner OHI Pad	Wellbore	Gary Kestner OHI 210H AWB
Slot	Slot #210		

WELLPATH COMPOSITION - Ref Wellbore: Gary Kestner OHI 210H AWB				Ref Wellpath: Gary Kestner OHI 210H AWP Proj: 20475	
Start MD	End MD	Positional Uncertainty Model	Log Name/Comment	Wellbore	Survey Date
26.00	639.00	OWSG MWD rev2 + HRGM	01 Premier MWD <17 1/2"> (182'-639')	Gary Kestner OHI 210H AWB	1/16/2020
639.00	1995.00	OWSG MWD rev2 + HRGM	02 Premier MWD <12 1/4"> (740'-1995')	Gary Kestner OHI 210H AWB	1/16/2020
1995.00	6287.00	OWSG MWD rev2 + HRGM	03 Premier MWD <8 3/4"> (2072'-6287')	Gary Kestner OHI 210H AWB	1/16/2020
6287.00	20475.00	BH AutoTrak Curve (2019) (Short spacing)	04 BH AT Curve <8-1/2">(6287')(6311'-20450')	Gary Kestner OHI 210H AWB	1/11/2020

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REFERENCE WELLPATH IDENTIFICATION			
Operator	SOUTHWESTERN ENERGY	Well	Gary Kestner OHI 210H
Field	Ohio	API/Legal	
Facility	Gary Kestner OHI Pad	Wellbore	Gary Kestner OHI 210H AWB
Slot	Slot #210		

COMMENTS
Wellpath general comments API: 47-069-00305-0000 BH Job #: 110217111A Rig: SDC 41 Duration: 01/11/2020 - 01/15/2020

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